**WE CLAIM:**

1. A method of coding partially-masked image data, comprising:
receiving original image data to be coded;
receiving a definition of a mask;
coding the image data, according to the step of:
generating wavelet coefficients representing the image data to be coded, canceling coefficients of masked wavelets,
reconstructing image data based on the remaining wavelet coefficients,
for the reconstructed image data that lies outside the mask substituting the original image data therefor, the resultant image data to be coded for a next iteration of coding, if any; and
repeating the generating, canceling, reconstructing and substituting steps until convergence is reached.

2. The method of claim 1, wherein masked wavelets are those having a substantial portion of their energy located below the mask.

3. A method of coding partially-masked image data, comprising:
receiving image data to be coded and a mask;
coding the image data as transform coefficients in a plurality of stages, performed from finest scale to coarsest scale, wherein each stage of coding comprises:
setting the resolution of the image data to the scale of the instant stage,
generating transform coefficients representative of the unmasked image data, the transform coefficients associated with the scale of the instant stage,

identifying transform coefficients associated with image data located below the mask,

canceling the identified transform coefficients,

reconstructing image data based on the remaining coefficients,

for any portion of the reconstructed image data located outside of the mask, substituting the corresponding original image data therefor, and

repeating the generating, identifying, canceling and reconstructing steps until the reconstructed image data outside of the mask converges to the corresponding original image data.

4. The method of claim 3, wherein the transform coefficients are wavelet coefficients obtained by wavelet coding.

5. The method of claim 4, wherein the identified coefficients are clipped wavelets, wavelets having a substantial portion of their energy below the mask.

6. The method of claim 3, wherein the setting step includes low pass filtering the image data.

7. A method of coding partially-masked image data, comprising:

receiving image data and a mask, and

iteratively, until convergence is reached:

coding the image data as transform coefficients,

identifying transform coefficients corresponding to image data located under the mask,

for each identified coefficient w, modifying the coefficient by a transform $w'=w(1-\gamma)$, where $\gamma$ is an overshoot factor having a value from 0 to 2,

reconstructing image data from the modified transform coefficients and the unaltered transform coefficients,

for any portion of the reconstructed image data $x'_i$ that differs from a corresponding portion of the received image data $x_i$, resetting the reconstructed image data to $x'_i=(1+\gamma)x_i$.

8. The method of claim 7,wherein the transform coefficients are wavelet coefficients obtained by wavelet coding.

9. The method of claim 8, wherein the identified coefficients are clipped wavelets, wavelets having a substantial portion of their energy below the mask.

10. A coded data signal representing partially-masked image data, the signal constructed according to the steps of:

receiving image data to be coded and a mask;

coding the image data according to the steps of:

generating wavelet coefficients of the image data,

canceling coefficients of masked wavelets,

reconstructing image data based on non-masked wavelets,

for any portion of the reconstructed image data that lies outside of the mask, substituting the original image data therefor, and

repeating the generating, canceling, reconstructing and substituting steps until convergence is reached; and

outputting the coefficients of the non-masked wavelets as the coded image data.

11. A coded data signal representing partially-masked image data constructed according to the process of:

receiving original image data to be coded and a mask;

coding the image data as transform coefficients in a plurality of stages, performed from a finest scale to a coarsest scale, the coding for at least one stage comprising:

filtering the image data at a resolution corresponding to the scale of the instant stage,

generating transform coefficients representative of the filtered image data, the transform coefficients associated with the scale of the instant stage,

identifying transform coefficients associated with image data located below the mask,

canceling the identified transform coefficients,

reconstructing image data based on the remaining coefficients,

for any portion of the reconstructed image data located outside of the mask, substituting original image data therefor, and

repeating the generating, identifying and canceling steps until the reconstructed image data converges to the original image data outside of the mask; and

outputting the unaltered transform coefficients from each stage as the coded data signal.

12. The coded data signal of claim 11, wherein the transform coefficients are wavelet coefficients obtained by wavelet coding.

13. A coded data signal representing partially-masked image data, constructed according to the process of:

receiving image data to be coded and a mask;

initializing reconstructed image data to the received image data; and

iteratively, until convergence is reached:

generating transform coefficients representative of the reconstructed image data,

identifying transform coefficients associated with image data below the mask,

for each identified transform coefficient w, modifying the coefficient by $w'=w(1-\gamma)$, where $\gamma$ is an overshoot factor having a value from 0 to 2,

reconstructing image data from the modified transform coefficients and the unaltered transform coefficients, and

for any portion of the reconstructed image data $x'_i$ that differs from a corresponding portion of the received image data $x_i$, setting the reconstructed image data to $x'_i=(1+\gamma)x_i$,

14. The coded data signal of claim 13, wherein the transform coefficients are wavelet coefficients obtained by wavelet coding.